



Docket No: 116598-00113
Response to Office Action dated July 27, 2006
Application Serial No: 10/806,269

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

IN THE CLAIMS

Claim 1 (Currently Amended): A multilayer circuit comprising a flexible sheet of insulating material having two sides, and

~~wherein conductive sections are attached to both of said two sides~~ at least one first conductive layer laminated to a first side of said flexible sheet and at least one second conductive layer laminated to a second side of said flexible sheet,

wherein said flexible sheet is folded along folding lines, which divide said flexible sheet into consecutive segments, in order to form a multilayer structure having conductor layers formed by the at least one first conductive layer and the at least one second conductive layer ~~the conductive sections~~ and insulator layers of the flexible sheet of insulating material stacked above each other, ~~the conductive sections~~ at least one first conductive layer and the at least one second conductive layer being interconnected to form an electric circuit, and

wherein at least two consecutive ~~sections~~ layers of the electric circuit that must be insulated from each other are disposed on different sides of said flexible sheet.

Claim 2 (Currently Amended): The circuit of claim 1, wherein consecutive sections of electric circuit that must be insulated from each other are insulated by one single ply of said flexible sheet.

Claim 3 (Withdrawn and Currently Amended): The circuit of claim 2, wherein said at least two consecutive ~~sections~~ layers of electric circuit that must be insulated from each other lie on opposite sides of said folding flexible sheet, on adjacent segments of said flexible sheet.

Claim 4 (Withdrawn and Currently Amended): The circuit of claim 2, wherein ~~sections~~ layers of electric circuit that must not be insulated from each other lie on the same side of said folding flexible sheet, on adjacent segments of said flexible sheet.

Claim 5 (Withdrawn and Currently Amended): The circuit of claim 2, comprising electrical connection means between said ~~conductor layers~~ at least one first conductive layer and said at least one second conductive layer.

Claim 6 (Withdrawn): The circuit of claim 5, further comprising apertures in said flexible sheet in correspondence with said electrical connection means.

Claim 7 (Withdrawn): The circuit of claim 5, wherein said electrical connection means is a rivet.

Claim 8 (Withdrawn): The circuit of claim 5, wherein said electrical connection means is a solder joint or a solder layer.

Claim 9 (Withdrawn and Currently Amended): The circuit of claim 2, wherein ~~said conductor layer~~ at least one of said at least one first conductive layer and said at least one second conductive layer has [[at]] a discontinuity in correspondence with the folding lines, in order to guide the folding.

Claim 10 (Original): The circuit of claim 2, including magnetic and/or electric and/or electronic components.

Claim 11 (Original): The circuit of claim 10, wherein said components are inside said multilayer structure.

Claim 12 (Currently Amended): The circuit of claim 2, including at least one cavity and apertures.

Claim 13 (Withdrawn): The circuit of claim 2, configured to form an inductor or an electrical transformer or an electrical filter.

Claim 14 (Withdrawn): A method of manufacturing a multilayer circuit, comprising the steps of:

obtaining a conductor-insulator-conductor laminate having a central insulator flexible sheet and carrying circuit segments on both sides of said flexible sheet in a fashion that consecutive sections of electric circuit that must be insulated from each other are disposed on different sides of said flexible sheet; and,

folding said laminate along folding lines, which divide said flexible sheet into consecutive segments, in order to form a multilayer structure having conductor layers and insulator layers stacked above each other.

Claim 15 (Withdrawn): The method of claim 14, wherein said step of obtaining said conductor-insulator-conductor laminate further comprises the step of selectively removing conductor areas from said conductor-insulator-conductor laminate.

Claim 16 (Withdrawn): The method of claim 14, wherein said step of obtaining said conductor-insulator-conductor laminate further comprises the steps of:

cutting a sheet of conductive material into a predefined pattern;

laminating said predefined pattern of conductive material on a sheet of a flexible insulator.

Claim 17 (Withdrawn): The method of claim 14, further comprising the steps of:
creating apertures in said flexible sheet, in correspondence to places where said sections of electric circuit must be joined;
placing electrical connection means to join said sections of electric circuit in said apertures.

Claim 18 (Withdrawn): The method of claim 17, wherein said electrical connection means is a solder layer and further comprising the step of melting said solder to obtain an electrical connection.

Claim 19 (Withdrawn): The method of claim 14, wherein several of said multilayer circuits are formed at the same time from said laminate.

Claim 20 (Withdrawn): The method of claim 14, wherein the laminate is guided through the different process steps as a continuous strip.

Claim 21 (Currently Amended): The circuit of claim 1, wherein at least one of the conductive sections at least one first conductive layer and the at least one second conductive layer comprise metallic conductors.

Claim 22 (Currently Amended): The circuit of claim 1, wherein at least one of the at least one first conductive layer and the at least one second conductive layer ~~conductive sections~~ comprise conductive elements.

Claim 23 (Currently Amended and Withdrawn): An inductive device comprising a flexible sheet of insulating material having two sides, and
~~wherein conductive sections are attached to both of said two sides,~~ at least one first conductive layer laminated to a first side of said flexible sheet and at least one second conductive layer laminated to a second side of said flexible sheet,

wherein said flexible sheet is folded along folding lines, which divide said flexible sheet into consecutive segments, in order to form a multilayer structure comprising conductor layers formed by the ~~conductive sections~~ at least one first conductive layer and the at least one second conductive layer and insulator layers of the flexible sheet of insulating material stacked above each other, the ~~conductive sections~~ at least one first conductive layer and the at least one second conductive layer being interconnected to form an inductive circuit, and

wherein at least two consecutive conductive sections of the electric circuit that must be insulated from each other are disposed on different sides of said flexible sheet.